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On the Effect of Managerial Power on Psychological Characteristics of Entrepreneurial Employees (Case Study: Agriculture Jahad Organizations of Western Azarbaijan Province)

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The main objective of this research was to investigate **I** the effect of managerial power on entrepreneurship psychological characteristics of employees in Agriculture Jahad Organizations of Western Azarbaijan Province, Iran. The stratified random sampling method was applied for data collection. In order to collect data, the power assessment questionnaire developed by Hinkin and Schriesheim (1989) and that of assessing entrepreneurship psychological characteristics developed by Durham Institute were used. Structural Equation Modeling (SEM) based on partial least squares approach and SmartPLS v2 were used to analyze data. Results showed a significant positive relationship between managerial power (except for coercive power) and achievement orientation, intrinsic control, creativity, ambiguity tolerance, and independence characteristics; however, no significant relationship was observed between managerial power and the risk-taking characteristic. Additionally, results from the structural model showed managers' referent and expert powers have a significant positive effect on entrepreneurship psychological characteristics of employees. Therefore, drawing on the results of this research and the proper use of their power, managers of Agriculture Jahad Organizations can develop and strengthen entrepreneurial characteristics and entrepreneurship spirit amongst their employees, and consequently, guarantee the organization success and prosperity.

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INTRODUCTION

In this era, organizations can ensure their survival, growth, and profitability through their effective use of available resources (Analoui et al., 2009) and are innovative and creative in presenting their products and services (Goldsmith, 1995). Today, issues of entrepreneurship have become so important that they are dealt with in most universities around the world (Fallah Haghighi et al, 2018). In a rapidly changing world, organizations need to continually identify new opportunities beyond existing ones if they are to Survive (Korani, 2018) Entrepreneurship, innovation, and new trends are the fuel for development engines (Waltonkirikley, 2016). Undoubtedly, it is necessary to adopt an entrepreneurial attitude to ensure organization success (Daft, 2000). Entrepreneurship is an opportunity-based way of thinking and action (Jena & Sahoo, 2014). Despite the common belief that entrepreneurship exists only in the private sector, studies have shown that this category is also seen in non-profit (public) organizations, too (Jalilvand & Vosta, 2015). Management science experts have regarded entrepreneurship psychological characteristics of human resource as a factor affecting the success of any organization and have considered it besides other factors (Mohammadi et al., 2014). In general, organizations in which innovation and dynamism flow exists are more viable and advanced than other organizations (Fatima et al., 2016). Reaching such a situation requires a manager and leader, who is capable of significantly affecting the organization's performance (Rahimi et al., 2014). Successful leaders and managers can effectively use their power and this helps organizations attain their goals (Jalilvand & Vosta, 2015). In fact, organizations need managers who challenge the existing norms and use their human resources in the best possible way (Milana & Maldon, 2015). Since sociologists and psychologists entered into the field of entrepreneurship research, the necessity of entrepreneurship, and especially, the strengthening of the entrepreneurship psychological characteristics of employees in organizations have become evident more than ever (Rezae & Gholipour, 2016).

The cure and way of rescue for today's organizations are turning to entrepreneurial approaches. To be successful and survive, every organization should always stand on the path of innovation and development. Agricultural departments are among the agencies which have a long history; therefore, they can be revived by innovating and developing the entrepreneurial spirit in their employees. The Iranian agricultural sector must always play a leading role in economic development and progress; however, the problems with the administrative and economic structure in Iran have led the sector to fail to play its main role, while empowering employees to act like entrepreneurs and strengthening entrepreneurial characteristics in them can lead to organizational productivity, and consequently, economic advancement in this sector.

This issue has been less addressed, while there are many opportunities and capabilities in this part for strengthening entrepreneurial psychological characteristics of human resource and hence for personal and organizational empowering and efficiency. By strengthening the abovementioned characteristics in their employees and increasing their entrepreneurial spirit, Agriculture Jahad Organizations can affect employees' effectiveness and efficiency and consequently can promote the quality of their activities. It should be investigated that which tools and powers the managers of these organizations can use to strengthen these characteristics in their employees. Therefore, the current research seeks to investigate the effect of managerial power on the entrepreneurship psychological characteristics of employees of Agriculture Jahad Organizations in West Azarbaijan Province.

Power is defined as the capability of a person to affect another one to do something (Jalilvand & Vosta, 2015). Studying power and its effects and how to use it are of paramount importance in organizational success

(Pinnow, 2011). Power is a function of influence without using sanctions and threats (Robbins, 2007). In this regard, the influence is related to respect. For instance, when we respect others, we meet their demands; therefore, it can be inferred that managerial power is positive in this regard. French and Raven (1959) define power as the capability or potential ability of an agent (manager) to change the behavior, tendencies, attitude, beliefs and emotions or values of a target (employee) (Cho, 2006). The most important analysis with regard to managerial power has been presented by French and Raven (1959). They identified five powers in organizational environments, including legitimate power, reward power, coercive power, referent power, and expert power (Morhed & Giriffin, 2007). Legitimate power is originated from organizational rank and position and relies on the official position of the person (Rezaeian, 2007). Reward power is the ability to provide things that individuals like to have (Rezaeian, 2006). Coercive power is based on the employees fear and its basis is either fear or threat (Rezaeian, 2007). A leader is said to have referent power when employees attribute good traits such as honesty, trusteeship, and secrecy to her (Morhed & Girifin, 2007). Expert power is the ability to control other people's behavior through knowledge, experience, and judgment they lack but need (Rezaeian, 2006).

Entrepreneurship is a key element in increasing a company's innovation capacity and realizing its competitive advantage (Castrogivani et al., 2011). Organizations can be active and risk taker through the activity of their innovative members (Shokrolahi & Karimi, 2016). In entrepreneurship studies, researchers have divided factors affecting entrepreneurial behavior into three factors: social, environmental and individual. Individual factor model, which is widely known as the characteristics model, focuses on psychological characteristics of entrepreneurs (Gurol & Atsan, 2006). Characteristics/traits approach is more common compared to other entrepreneurship approaches (Kruzic & Pavic,

2010). The psychological characteristics approach highlights this hypothesis that entrepreneurs have characteristics and values providing them with a driving force and differentiating them from others (Gurol & Atsan, 2006). Entrepreneurship literature also holds that entrepreneurs have different characteristics (Matviuk, 2010).

During the last few decades, some psychologists and researchers have sought to disentrepreneurs' psychological cover (personality) traits. The main goal of these research studies has been motivation for advancement, creativity, self-confidence, risktaking, a focus on control, and accountability (Mardanshahi et al., 2014). Following the review of the literature on entrepreneurship psychological characteristics of employees, the following characteristics were investigated in the present study based on the scale developed by the Durham Institute for Entrepreneurship in the United Kingdom to assess entrepreneurship psychological characteristics of employees.

Achievement orientation: It is the tendency to do works in the best possible way and to make attempts to reach the peak of success (Olakitan & Ayobami, 2011).

Intrinsic control: believing that events are the result of human performance, not environmental factors (Arslan et al., 2009).

Creativity: It means creating new ideas (Furnham & Backtiar, 2008)

Risk-taking: It means the acceptance of calculated risks (Ahmadpour Daryani, 2004).

Ambiguity tolerance: It means enduring ambiguous situations and right decision making in these conditions (Gurol & Atsan, 2006).

Independence: It means having control over one's fate and be one's own boss (Ahmadpour Daryani, 2004).

Pourvaghaz and Mohammadi (2011) conclude that there is a significant direct relationship between powers used by managers and entrepreneurship personality characteristics amongst employees. Research findings have shown that the source of reward and referent powers of managers plays the greatest role in predicting entrepreneurship per-

sonality characteristics of employees. Hasanzadeh (2014) shows that expert, referent and reward powers are significantly directly related to entrepreneurship characteristics of employees. Additionally, he shows that there is a significant inverse relationship between coercive power and entrepreneurship characteristics of employees. Sedaghatkish and Nasrolahi (2016) conclude that there is a significant direct relationship between managers' power and entrepreneurship personality characteristics of employees, and reward, referent and expert powers have a greater role in predicting the abovementioned characteristics. Keyvani (2013) showed managers' power affects employees' organizational commitment, and amongst managers' power resources, referent and expert powers have greater explanatory potential than other resources. In another study, Jong and Hartog (2007) show the innovative and entrepreneurial behavior of organization members (employees) is affected by how management deals with organization members, how managers communicate with employees, and their management style plays a pivotal role. Jalilvand and Vosta (2015) conclude that the five powers of managers (except for coercive power) have a significant positive relationship with the emotional commitment of employees and are predictive of the dependent variable at a proper level. Smith et al. (2006) show the profound effect of environment on human attitude toward self and others; therefore, how organization management deals with its employees can act as the main facilitator in motivating entrepreneurial behaviors and strengthening and developing these behaviors in employees.

The main aim of this research was to investigate the effect of management power on entrepreneurship psychological characteristics amongst employees of Agriculture Jahad Organizations of West Azarbaijan Province. Considering the theoretical principles of the present research and the literature inside and outside of Iran, the conceptual model of the research was formulated as shown in Figure 1.

Considering the conceptual model, the cur-

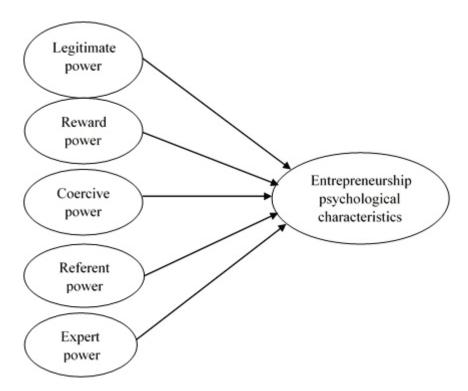


Figure 1. The conceptual model of the research

rent research attempts to answer the following questions:

What is the status of managerial power and entrepreneurship psychological characteristics of employees in the studied population?

Is there any relationship between managerial power and entrepreneurship psychological characteristics of employees?

Does managerial power affect entrepreneurship psychological characteristics of employees?

METHODOLOGY

Considering research objectives, the present study is an applied one and regarding data collection and analysis method, it is a descriptive correlational study based on Structural Equation Modeling (SEM) (partial least squares approach). The statistical population of the research consisted of managers and employees of Agriculture Jahad Organizations and the general directorate of Agriculture Jahad of West Azarbaijan Province, Iran. Based on Morgan's Table of sample size, the statistical sample size was estimated to be 328 individuals (80 managers and 248 employees) as calculated by the stratified random sampling method. In fact, the sample was taken from two spectra of community members, including managers (heads of organizations, deputies, and division managers) to number of 100 people and employees (700 people) based on statistical population size. The power assessment questionnaire developed by Hinkin and Schriesheim (1989) and the questionnaire of assessing entrepreneurship psychological characteristics of employees (Durham) were used for data collection. It should be noted that both questionnaires were standard. The managers' power assessment questionnaire has five components and each component is measured using four items. Overall, this questionnaire has 20 items. The second questionnaire has six components. Each component is measured by four items and in general, it has 24 items. It should be noted that before data analysis, data packing method was used for

classification in a way that on average, each sector employee' questionnaires were put against the questionnaire of their sector manager.

From the validity perspective, the questionnaires were investigated in three aspects: For face validly, the questionnaires were investigated and modified by two management professors and some members of the sample based on their apparent form. For content validity, Content Validity Index (CVI) and Content Validity Ratio (CVR) forms were prepared for both questionnaires and were distributed amongst 12 experts. After modification, CVI and CVR values were calculated to be 0.79 and 056, respectively. Considering the table presented by Lawshe (1975), these values confirm the content validity of the questionnaires. Finally, for construct validity, after the completion of the questionnaires, the convergent validity and divergent validity were investigated and confirmed as referred to in the Results section. As shown in Table 1, the reliability of questionnaires was obtained to be above 0.7 for all variables using Cronbach's alpha and was confirmed because if Cronbach's alpha is more than 0.7, the questionnaire has acceptable reliability (Cronbach. 1957). Additionally, Composite Reliability (CR) as one of the important indices in investigating the questionnaire reliability in the given model was investigated, and as the CR value for all variables was above 0.7, the questionnaire was confirmed to be reliable, indicating that the measurement instrument in the given model has the proper reliability (Hair et al., 2006).

Data were analyzed using SPSS and Smart-PLS 2.0. To analyze the data with SmartPLS software, after the measurement model is investigated and before the structural model is implemented, the researcher should perform 17 tests to see if questionnaires are reflective and 21 tests to find out if questionnaires are composite to ensure results. Then, the research structural model can be presented confidently (Hair et al., 2006).

Table 1

Variable	Component	Number of items	Cronbach's alpha
	T	,	
	Legitimate power	4	0.765
	Reward power	4	0.718
Managerial power	Coercive power	4	0.798
	Referent power	4	0.829
	Expert power	4	0.811
Entrepreneurship psycho-	Achievement orientation	4	0.826
logical characteristics	Intrinsic control	4	0.865
	Creativity	4	0.789
	Ambiguity tolerance	4	0.899
	Risk taking	4	0.847
	Independence	4	0.849

RESULTS

The results of the descriptive analysis indicated that 15 percent of respondents were female and 85 percent were male, and the highest age frequency was in the age group of 40-50 years. The majority of respondents (85 percent) held a bachelor or higher degree. The field of study of 75 percent of respondents was related to their job and the service life of 65 percent of respondents was 15 years or greater. In addition, 20 percent of respondents to the entrepreneurship psychological characteristics of employees' questionnaire were female and 80 percent were male, and the highest frequency was in the age group of 30-40 years. Most of the respondents (80 percent) had a bachelor or higher degree. The field of study was related to their job in 80 percent of respondents and the service life of more than 85 percent of respondents was 5 years or greater.

In order to answer the first question as to the investigation of the managerial power status and entrepreneurship psychological characteristics of employees, Tables 2 and 3 summarize the statistical distribution of the mean, standard deviation, and the results of one-sample t-test scores of managerial power and entrepreneurship psychological characteristics amongst employees according to the average score 3.

Table 2

Variable	Mean	SD	t-value	P-value
Legitimate power	4.071**	0.612	23.621**	0.000
Reward power	3.850**	0.754	14.746**	0.000
Coercive power	1.873**	0.602	-21.12**	0.000
Referent power	4.010**	0.914	14.152**	0.000
Expert power	3.712**	0.945	9.420**	0.000

The results show that legitimate power (4.071) and coercive power (1.873) have had the highest and lowest means amongst manager powers, respectively. Considering these means, the major sources of managerial powers can be enumerated as legitimate, referent, reward, expert, and coercive from the highest to lowest, respectively. The results also indi-

cate that the means of legitimate, referent, reward and expert powers were higher than the average i.e., score 3. This shows the medium to high level of these variables in the studied population, but the coercive power was lower than the average. Considering the significance level, the results are significant and acceptable at the 99% confidence level.

Table 3

Results of One-Sample t-Test of Entrepreneurship Psychological Characteristics of Employees (n=248)

Variable	Mean	SD	t-value	<i>P</i> -value
Achievement orientation	4.041^{**}	0.63	22.341**	0.000
Intrinsic control	3.715**	0.53	20.312**	0.000
Creativity	3.915**	0.54	21.541**	0.000
Ambiguity tolerance	4.121**	0.56	19.012**	0.000
Risk taking	3.705**	0.55	18.510**	0.000
Independence	3.812**	0.45	22.790**	0.000

**P<0.01

According to the results, from among entrepreneurship psychological characteristics of employees, achievement orientation (4.041) and risk-taking (3.705) exhibited the highest and lowest mean, and considering the means, entrepreneurship psychological characteristics among employees could be ranked in the order of achievement orientation, ambiguity tolerance, creativity, independence, intrinsic control, and risk-taking in terms of their importance. Additionally, the results showed that the means of all components of entrepreneurship psychological characteristics of employees were significantly (*P*< 0.01) higher than the average (i.e. score 3). Therefore, it can be said that the employees of these organizations have characteristics that are consistent with the psychological characteristics of entrepreneurship.

In order to answer the second research question with regard to investigating the relationship between managerial power and entrepreneurship psychological characteristics of employees, the correlation matrix between managerial power and entrepreneurship psychological characteristics of employees was examined. Considering the results presented in Table 4, there is a significant positive relationship between managerial powers (except for coercive power) and entrepreneurship psychological characteristics of employees. Considering the correlation coefficients, the intensity of the relationship between legitimate power and entrepreneurship psychological characteristics of employees was weak, but it was strong between other powers with the abovementioned characteristics (referent, expert, reward). Therefore, entrepreneurship psychological characteristics of employees can be strengthened if managers make use of these powers to a greater extent. Moreover, the results of the relationship between managerial power and different components of the abovementioned characteristics showed a significant positive relationship between managerial powers (except for coercive power) and components of achievement ori-

entation, intrinsic control, creativity, ambiguity tolerance, and independence, but no significant relationship was observed between managerial power and risk-taking component.

Table 4	
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Results of the Coefficient of Correlation between Managers' Power Components and Characteristics of Entrepreneurship

Variable	Legitimate power	Reward power	Coercive power	Referent power	Expert power
Variable	r	r	r	r	r
Achievement orientation	0.316**	0.351**	-0.141	0.412**	0.451**
Intrinsic control	0.245**	0.212**	-0.149	0.351**	0.245**
Creativity	0.206**	0.301**	0.212	0.356**	0.234**
Ambiguity tolerance	0.389**	0.467**	-0.690	0.618**	0.457**
Risk taking	0.145	0.035	0.065	0.089	0.066
Independence	0.189*	0.345**	-0.450	0.412**	0.340**
Entrepreneurship					
psychological	0.245**	0.361**	-0.051	0.481^{**}	0.395**
characteristics					

P*<0.05, *P*<0.01

Finally, in order to answer the third research question as to whether the managerial power affects entrepreneurship psychological characteristics of employees, the measurement model (external model) should be investigated first and modified if required (i.e. items with factor loadings of less than 0.7 should be excluded from the model). Then, as questionnaires are reflective, the required tests should be examined and confirmed, and then the structural model should be proposed and tested to investigate the effect of independent variables on the dependent one (Gefen & Straub, 2005). In the current research, all of the abovementioned tests were done and confirmed based on Hair et al. (2006). Some of them are presented below.

The first test addressed the uni-dimensionality of the variable items (the homogeneity of variables). It was done by investigating the reflective measurement model, factor loadings, and significance of the mentioned coefficients. The third question of coercive power and reward power and the fourth question of the risk-taking component were excluded from the model due to their factor loading being less than 0.7. After investigating the research model in standard coefficients mode, the significance of these coefficients was also investigated. The results indicated the significance of all obtained coefficients. The next test focused on construct validity (convergent validity and divergent validity). At first, convergent validity conditions (factor loadings of higher than 0.7, average variance extracted (AVE) for all variables of higher than 0.5 and the last condition (CR>AVE)) were investigated and confirmed for all variables (Muller, 2013), and then, divergent validity tests, including cross loading test and Fornell and Larcker test, were conducted and confirmed before the implementation of the structural model (internal model). Therefore, the researchers were allowed with complete confidence to propose the structural model with Pls to investigate the research questions. The modified structural model of the research is displayed in Figure 2, showing the research structural model in the standard state of coefficients. Additionally, after presenting the structural model, in order to investigate the significance of the obtained coefficients, the researchers investigated the structural model in the significance state of coefficients. Fortunately, all of the coefficients were significant.

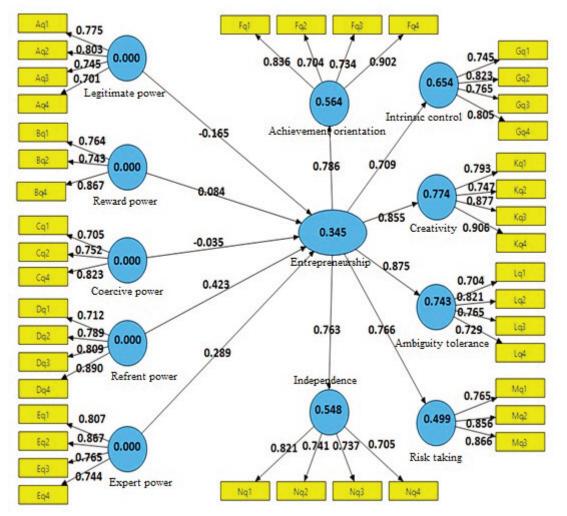


Figure 2. The modified structural model in the standard state of coefficients

As shown in Figure 2 and Table 5, after investigating the effect of managers' power components on the entrepreneurship psychological characteristics of employees in the model, the effect of referent power and expert on the entrepreneurship psychological characteristics of employees is significantly positive, and the referent power has the greatest effect on the mentioned characteristics and in the next place, the expertise power affects entrepreneurship psychological characteristics of employees, and other powers do not have a significant effect on entrepreneurship psychological characteristics of employees. In the current research, R² was found

to be 0.345 i.e., in general, the managerial power predicts 34.5 percent of psychological characteristics of employees entrepreneurship.

In order to assess the structural models in the partial least squares approach, the ability of the model to predict the dependent variables and the quality of the structural model were investigated. To this purpose, R² coefficients and Q² criterion were used (Rahimi et al., 2017). In the current research, R² and Q² (communality) were found to be 0.345 and 0.452, respectively (Table 6). Three values of 0.19, 0.33, and 0.67 have been regarded as the criteria for weak, medium, and strong R²

Table 5

Component	Regression coefficient	t-value	<i>P</i> -Value
T 1.1 1			
Legitimate power	-0.165	1.650	0.062
Reward power	0.804	0.751	0.165
Coercive power	-0.035	0.445	0.251
Referent power	0.423	4.541**	0.000
Expert power	0.289	3.521**	0.001

Summary of Results of Investigating the Effect of Managers' Power Components on Entrepreneurship of Employees

**P<0.01

(Hair et al., 2006). From the value obtained for R², it can be inferred that this value is for a medium and higher level of entrepreneurship psychological characteristics amongst employees. The positive value of Q² shows the desirable quality of the structural model (Henseler et al., 2010). The next important index shows the overall model's Goodness of Fit (GOF) which is shown in Table 6. Considering the positive value of commonality index and redundancy index and three values of 0.1, 0.15, and 0.36 (Kline, 2005) introduced as weak, medium and strong for GOF and the value of 0.394 derived for GOF, the model has a proper and strong fitness and can be generalized to the whole statistical population. GOF index was measured for both models and a structure was considered and used as a criterion to predict the overall performance of the model. It is calculated using the following formula:

GOF = $\sqrt{\text{Communality} \times \text{R2}}$

Table 6

The Goodness of Fit the Overall Model of the Research

	R ²	Commonality	GOF
Entrepreneurship characteristic	0.345	0.452	
Managerial power			0.394

DISCUSSION

In the present century, considering the increased new rivals and the high dominant complexity, any organization that fails to create the required space and structure to nurture spontaneous people and innovators will be doomed to fail in a long time. Meanwhile, managers play an important role. They can influence their employees through effective use of tools and power at their disposal (Mollahoseini & Kahnoji, 2007) and provide the suitable space and conditions to develop and strengthen entrepreneurship psychological characteristics amongst employees and create a competitive advantage for their organization in today's competitive world. Nowadays, all societies and organizations know that human resource is the most important factor in organization success and sustainability. The more efficient, more motivated and more capable these resources are, the greater the adaptability and compatibility of the organization will be with the unpredictable environment. Therefore, the organization's success and life will be guaranteed.

Investigating variables status in this research shows that among managers' powers, legitimate, referent, reward, and expert powers are the dominant powers, respectively. In other words, legitimate power induced by a manager's rank and position causing managers to lead subordinates' behavior and in-

fluence them using their rank and position is used by managers more than other powers. In the next place, the referent power from manager's charisma and personal attraction, reward power which is the ability to provide things people like to have, and the expert power which is accompanied by the manager's know-how and skill are three power resources used and agreed upon by managers after legitimate power. Results of this research are in agreement with those obtained by Torabian (2006), showing referent and expert powers are two important sources for managers, but they are inconsistent with the results obtained by Pourvaghaz and Mohammadi (2011) introducing referent, reward and expert powers as dominant powers. This inconsistency may emanate from the differences in research statistical population because the abovementioned research was carried out in a nongovernmental organization whose managers have limitations in presenting rewards.

Research findings about entrepreneurship psychological characteristics amongst employees also showed that amongst entrepreneurship psychological characteristics of employees, achievement orientation has the highest mean and ambiguity tolerance, creativity, independence, intrinsic control, and risk-taking are in the next places, respectively. It was found that most employees of the investigated population had high achievement orientation. It means that they are motivated by challenging works and in order to reach success, they like to resolve problems and determine goals individually and take the responsibility to achieve them.

In total, considering the results it can be said that the studied employees are in agreement on entrepreneurship psychological characteristics of employees and these characteristics have a proper status amongst employees. Moreover, Hasanzadeh (2014) obtained some results similar to those found in this research, but there were some differences with respect to risk-taking component. In addition, the results of this research were to a large extent in agreement with those obtained by Pourvaghaz and Mohammadi (2011) because they also concluded that entrepreneurship characteristics of employees in the given population were in a proper status. Considering the relationship between managers' powers and entrepreneurship of employees and the effect of managers' power on entrepreneurship personality characteristics amongst employees, the researcher concluded that there was a relationship between managerial powers (except for coercive power) and entrepreneurship psychological characteristics amongst employees and according to the values presented by Hair et al. (2011), the intensity of this relationship between referent, expert and reward powers, and these characteristics is strong. Other results showed a significant positive relationship between managerial powers (except for coercive power) and achievement orientation, intrinsic control, creativity, ambiguity tolerance, and independence components, but no significant relationship was observed between managerial powers and risk-taking component.

Additionally, in order to investigate the effect of managerial power on entrepreneurship psychological characteristics of employees, researcher proposed a structural model and investigated the relationships and their effect on the mentioned characteristics. The results showed that referent and expert powers had a significant positive effect on entrepreneurship psychological characteristics of employees and the referent power had the greatest effect on these characteristics. In this regard, our results are in agreement with those obtained by Jalilvand and Vosta (2015), Rahimi et al. (2014) and Howard (2004) because in most of these research studies there was a relationship between five powers except for coercive power and the characteristics of entrepreneurship of employees, and referent and expert powers were strongly predictive of the dependent variable.

Finally, in order to ensure the proposed model and its generalizability, the researcher investigated fitness indices in the proposed model. Fortunately, considering fitness indices, namely GOF index, the proposed model can be generalized to the research population under study. It means that the proposed structural model can be generalized to the investigated population and its results can be used with complete confidence.

CONCLUSION AND RECOMMENDATION

Results showed a significant positive relationship between managerial power (except for coercive power) and achievement orientation, intrinsic control, creativity, ambiguity tolerance, and independence characteristics; however, no significant relationship was observed between managerial power and the risk-taking characteristic. Additionally, results from the structural model showed managers' referent and expert powers have a significant positive effect on entrepreneurship psychological characteristics of employees. Therefore, drawing on the results of this research and the proper use of their power, managers of Agriculture Jahad Organizations can develop and strengthen entrepreneurial characteristics and entrepreneurship spirit amongst their employees, and consequently, guarantee the organization success and prosperity. Therefore, the following suggestions can be drawn from the results:

Given the results of the study and regarding the status of managers' five powers in this research and researcher's findings, it is suggested that managers and heads of sectors make special attempts to use these powers and use legitimate, referent, reward and expert powers more, so that they can strengthen psychological characteristics of entrepreneurship of their employees and reduce their coercive power as much as possible;.

Given the status of entrepreneurship psychological characteristics among employees, it is suggested that employees have a broad back in ambiguous situations and increase their intrinsic control with forethought and conditions analysis and convert these situations to opportunity by intelligent analysis. It is suggested to managers and heads of sectors to help employees in these situations using their referent and expert powers and cause these two characteristics to be strengthened in employees.

Given the results about variables and the effect of managerial power on entrepreneurpsychological characteristics ship of employees, it is suggested to the investigated organizations' managers to use referent, reward, and expert powers in proper situations in the best possible way by considering the strong relationship between referent, expert and reward powers as well as regarding the significant positive role of referent and expert powers in predicting these characteristics, and it is suggested to reduce their coercive power and use their legitimate power when required as the last solution so that it can pave the way to develop and strengthen entrepreneurship psychological characteristics amongst employees and in this way the organization can be led toward success because entrepreneur employees better use organizational resources and bring about the dramatic developments and successes in the organization.

Given the effect of referent *power* on the abovementioned characteristics, managers should be aware that this type of power is accompanied by employees trust in manager and this is met in the shadow of trustship, the secrecy and honesty of a manager. Therefore, managers of these departments are recommended to *build employees confidence* by their secrecy, honesty, and trustship and pave the way to develop and strengthen these characteristics in employees, and thus their organization will benefit from its results.

Given the effect of managers' expertise power on these characteristics it is recommended that managers of these departments help employees by their expertise and experience when necessary and resolve their problems, and thereby improve the relationship with them, and provide the necessary platform for strengthening the characteristics of entrepreneurship in employees. This will insure their organization against the problems and create a competitive advantage.

It is suggested that the organization senior

managers and heads of the society under study pay attention to select organizations and division officials using the proposed model and avoid any political work in choosing expert individuals with traits such as honesty, secrecy, and trusteeship so that they can play a significant role in developing and strengthening characteristics of entrepreneurship of employees and play a potential role in strengthening the entrepreneurial spirit in their organization.

It should be acknowledged that all research works face limitations, and the researcher shows his scientific and moral honesty by expressing them and exposes his work to retest for higher efficacy. Amongst the limitations of this work were unwillingness and lack of cooperation from some department managers to complete questionnaires which is resolved by trying and effort and ensuring information confidentiality. In addition, we can refer to various cultures with regard to the existence of different ethnic groups and religions in the region which could somehow interfere with results. Therefore, considering the research results and limitations, it is suggested that future researchers use culture and ethnicity or religions as moderator variable in order to present more applied suggestions. In addition, it is suggested to pay attention to the role of managers' power resources in employees working actions, namely organizational citizen, organizational commitment, and employees' performance in further research.

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REFERENCES

- Ahmadpour Daryani, M. (2004). *Entrepreneurship definitions, theories and models.* Tehran: Pardis Publication.
- Analoui, F., Moghimi, S. M., & Khanifar, H.

(2009). Public sector managers and entrepreneurship in Islamic Republic of Iran. *Journal of Management Development, 28*(6), 522-532.

- Arslan, C., Dilmac, B. H., & Amartaa, E. (2009). Coping with strees and trait anxiety in terms of locus of control: astudy with Turkish University students. *Social Behavior and Personality*, *37*(6), 791-800.
- Castrogivanni, GJ, Urbano, D., & Laras, J. (2011). Linking corporate entreprene and human resource management in SMEs. *International Journal of Manpower*, *32*(1), 34-47.
- Cho, S. (2006). The power of public relations in media relations: A national survey of health practitioners. *Journalism and Mass Communication*, *83*(3), 563-580.
- Cronbach, A. (1957). Cofficient alpha and the internal structure of tests. *Psychometrika*, 6(3), 297-334.
- Daft, R. L. (2000). *Essentials of Organizational Theory and Design*. Cincinnati: South.
- Fallah Haghighi,N., Bijani, M.,Rezavandfar, A., & Valizadeh, N.(2018). Developing an Appropriate Model for Entrepreneurial Faculty of Agriculture in Iran of Entrepreneurship. *Management and Sustainable Development*, *8*(4), 501-518.
- Korani.Z. (2018). The effect of knowledge management on organizational entrepreneurship among agricultural extentsion experts in Kermanshah Province, Iran. *International Journal of Agricultural Management and Development, 8*(4), 501-518.
- Fatima, S.M., Hasan M., & Mohammed, S.A. (2016). Factors influencing women entrepreneurs' performance in SEMs. World Journal of Entrepreneurship. *Management and Sustainable Development*, 12(2), 82-101.
- French, J.R.P., & Raven, B.H. (1959). The basis of social power", in Cartwright, D.(Ed.), Studies in Social Power, Institute for Social Research, University of Michigan, Ann Arbor, MI, pp. 150-167.
- Furnham, A., & Bachtiar, V. (2008). Personality and intelligence as predicators of creativity. *Personality and Individual Differences*,

45(7), 613-617.

- Gefen, D., & Straub, D.W. (2005). A partial guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communication of AIS*, *16*(5), 91-109.
- Goldsmith, A. A. (1995). The state, the market and economic development: A second look at Adam Smith in theory and practice. *Development and change*, *26*(4), 633-650.
- Gurol, y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students some insights for entrepreneurship education and training in Turkey. *Education & Training, 48*(1), 25-38.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate data analysis. Upper Saddle River*. NJ: Pearson Prentice Hall.
- Hair, J.F., Ringle, C.M., Sastedt, M. (2011). PLS-SEM indeed a silver bullet. *Journal of Marketing Theory & Practice*, *19*(2), 139-152.
- Hasanzadeh, A. (2014). Investigating the relationship between managers' power resources with entrepreneurship of governmental administration employees in Miandoab city. Unpublished thesis, Bonab: Faculty of Humanities, Islamic Azad University, Iran.
- Henseler, J., & Fassot, G. (2010). Testing moderating effects in pls path models: An illustration of available procedures, In Handbook of partial least squaires-conceots, Methods and Applications, V. Esposito Vinzi et al. (eds), Springer, Berlin; Hedelberg, New York.
- Hinkin, T.R., & Schriesheim, C.A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology*, 78(1), 561-567.
- Howard, S. (2014). Developing entrepreneurial potential in youth: The effects entrepreneurial education and venture creation. *University of South Florida Repot*, 4(2), 3-17.
- Jalilvand, M.A., & Vosta, L. (2015). Examining the relationship between managerial power and affective organization commitment. *Sport, Business and Management: An International Journal*, 5(4), 344-364.

- Jena, S., & Sahoo, C.K. (2014). Improving managerial performance: A study on entrepreneurial and leadership competencies. *Industrial and Commercial Training*, 46(3), 143-149.
- Jong, I., & Hartog, D. (2007). How leaders in fluency employees innovative behavior? *European Journal of Innovation Management*, 10(1), 91-64.
- Keyvani, S. (2013). A Model for explaining the five power resources of managers on the organizational commitment of Sistan and Baluchestan University Students. Unpublished thesis, Faculty of Humanities, Sistan and Baluchestan University,Iran.
- Kline, R.B. (2005). *Principles and practice of structural equation modeling, Third Edition*. New York: The Guilford press.
- Korani, Z. (2018). The Effect of Knowledge Management on organizational Entreprenurship among Agricultural Extentsion Experts in Kermanshah Province, Iran. International Journal of Agricultural Management and Development, 8(2), 245-255.
- Kruzic, D.X, & Pavic, I. (2010). Students' entrepreneurial characteristics: Empirical evidence from Croatia. *The Business Review Cambridge*, 14(2), 216-221.
- Lawshe, Ch. (1975). A quantitative approach to content validity. *Personal Psychology*, *28*,568-575.
- Mardanshahi, M. M., Tajik Esmaili, A. A., & Mobaraki, M. H. (2014). Investigating entrepreneurship talent in students entering and leaving public schools (Case study: Mazandaran State Universities). *Entrepreneurship Development*, 7(4), 755-771.
- Matviuk, S.G. (2010). A study of Peruvian entrepreneurs' leadership expectations. *Journal of American Academy of Business, 16*(1), 65-70.
- Milana, E., & Maldon, I. (2015). Managerial characteristics and its Impact on organizational performance: Evidence from Syria. *Verslas: Teorijair Parktika*, 16(2), 212-221.
- Mohammadi, A., Talkhabi, A. Sh., & Lashkari, K. (2014). Investigating the Factors Affecting the Entrepreneurship of Public Relations Managers in Tehran. *Media Studies*, 9(24),

International Journal of Agricultural Management and Development, 9(2), 149-163, June 2019.

11-34.

- Mollahoseini, A., & Kahnoji, K. (2007). The study of relationship between five resource of manager's Authority and staff commitment In Rafsanjan. *Journal of Development and Capital*, 1(1), 117-132.
- Morhed, G. G., & Girifin, R. (2007). *Organizational behavior*. Translated by Seyyed Mehdi Alvani and Gholamreza Memarzadeh. Tehran: Morvarid Publications.
- Muller, R.O. (2013). *Basic principles of structural Equation modeling: An Introduction to LISREL and EQS*. Washington: Springer.
- Olakitan, O., & Ayobami A. P. (2011). An investigation of personality on entrepreneurial succes. *Journal of Emerging Trends in Economics and Management Science*, *2*(2), 95-103.
- Pinnow, D.F. (2011). Leadership- what really matters springer Heidelberg Dordrecht. London and New York: NY.
- Pourvaghaz, A.S., & Mohammadi, A. (2011). Investigating the relationship between the power sources of managers with personality traits of employee entrepreneurship. *Public Management Research*, 4 (12), 111-130.
- Rahimi, F., & Mohammadi, J., & Pourzare, H. (2017). Influence of high commitment human resource management on competitive advantage, *Management Studies in De*velopment & Evaluation, 25(82), 99-122.
- Rahimi, M., Safarkhani, M.H., Abdolmanafi, S., Sadeghi, A., & Mohammadi R. (2014). Investigation of the relationship between power resource used by managers and staff productivity in the selected hospitals of Kurdistan University of medical science. *Sadra Medical Sciences Journal*, *2*(3), 269-278.
- Rezae, S. Z., & Gholipour, M. (2016). Measuring the entrepreneurial spirit and the factors affecting it among young people the skills of the entrepreneurship course versus the untrained trainees of the General Directorate of Technical and Vocational Education in Zanjan. *Sociology of Youth Studies*,

6(21), 157-186.

- Rezaeian, A. (2006). *Basics of organizational behavior management*. Tehran: Samt Publications.
- Rezaeian, A. (2007). *Managing Political Behaviors in Organization (Advanced Organizational Behavior Management)*. Tehran: Samt Publication.
- Robbins, A. (2007). *Principles of Organizational Behavior, Translation, Ali Parsayian and Seyyed Mohammad Arabi.* Tehran: Office of Cultural Research.
- Sedaghatkish, F., & Nasrollahi, S. (2016). Investigating the relationship between managers' power resources and personality characteristics of employee entrepreneurship: Case study of Central Offices of Agricultural Bank of Iran, International Management Conference Elite.
- Shokrolahi, Jh., & Karimi, F. (2016). Pattern of social capital relations and knowledge management with entrepreneurial tendencies of employees of Isfahan tile Industries Company. *Productivity Management*, 9(36), 125-140.
- Smith, A. J, Collins, L.A. & Hannan, P.D. (2006). Creative disciplines education: a model for assessing ideas in entrepreneurship education? *Education and Training*, 48(2), 555-564.
- Torabian, S. (2006). Investigating the Relationship Between Power Resources Used by Managers and Organizational Climate in Governmental High Schools of Kerman, from the Viewpoint of Secretaries. Unpublished thesis, Faculty of Educational Sciences and Psychology, Shahid Beheshti University, Iran.
- Waltonkirkley, W. (2016). Entrepreneurial behavior: The role of values. *International Journal of Entrepreneurial Behavior & Research, 22*(3), 290-328.

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